- Agenda

Power BI Desktop works

Quick Recap

Explore Power BI Desktop

Launch Power BI Desktop

Publish a report

Connect to data sources

Get data from Excel

Knowledge Check

How Power BI Desktop works

1.Connect to data, including multiple data sources.
2.Shape the data with queries that build insightful, compelling data models.
3.Use the data models to create visualizations and reports.
4.Share your report files for others to leverage, build upon, and share. You can share Power BI Desktop *.pbix* files like any other files, but the most compelling method is to upload them to the Power BI service.

Power BI Desktop integrates proven Microsoft query engine, data modelling, and visualization technologies.

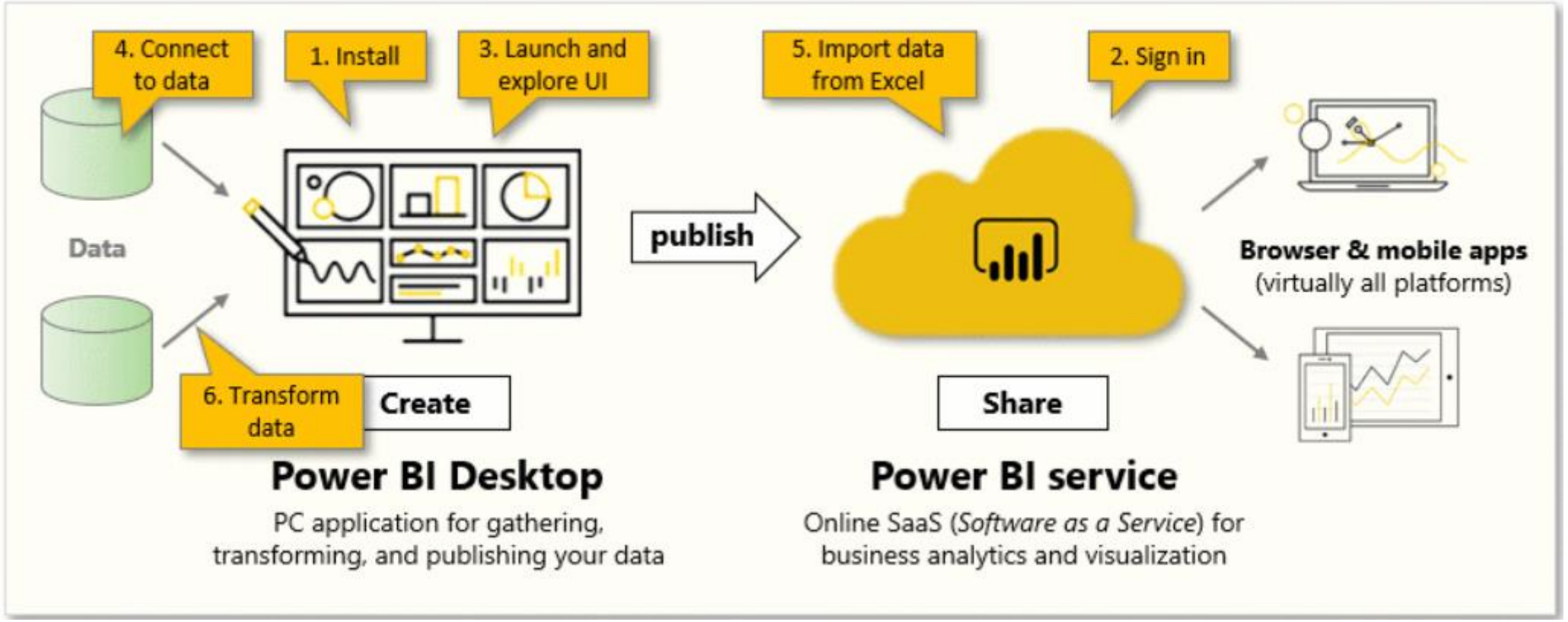
Data analysts and others can create collections of queries, data connections, models, and reports, and easily share them with others.

Through the combination of Power BI Desktop and the Power BI service, new insights from the world of data are easier to model, build, share, and extend.

Recap or Overview of Power BI Desktop

Power BI Desktop is a free application for PCs that lets you gather, transform, and visualize your data. In we can find and collect data from different sources and how to clean or transform it.

Power BI Desktop and the Power BI Service work together. You can create your reports and dashboards in Power BI Desktop, and then publish them to the Power BI Service for others to consume.

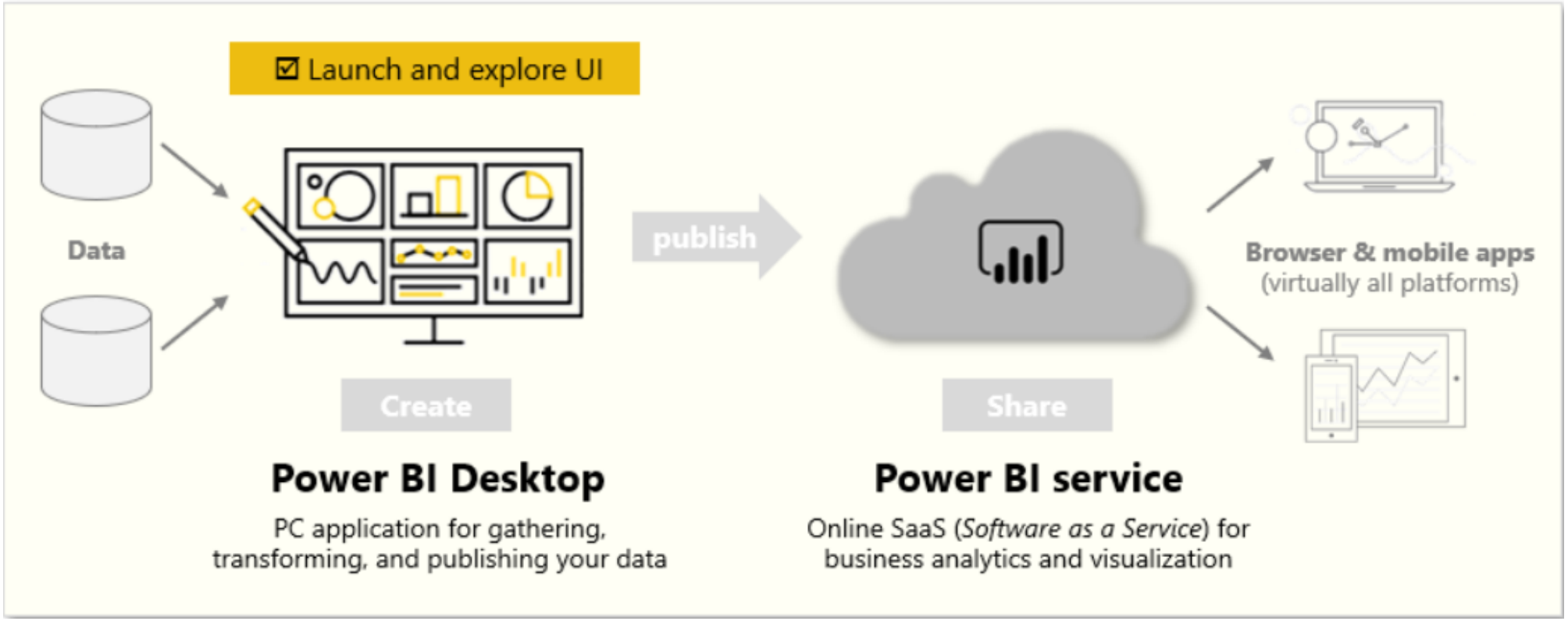


To perform the exercises in this module, you'll need to have Power BI desktop installed and have a Power BI Service account set up.

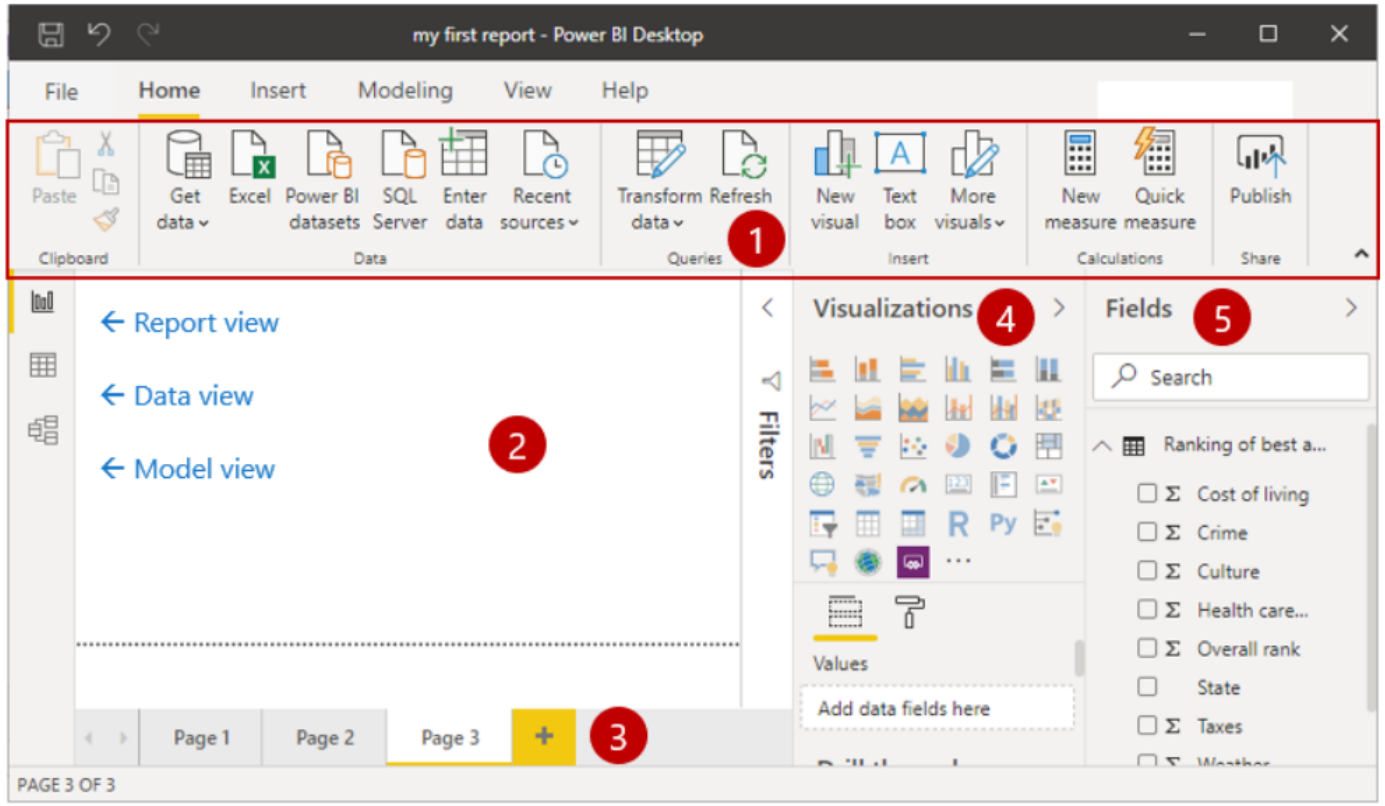
Explore Power BI Desktop

The idea of building and sharing reports is an abstract concept. It will make more sense if you explore Power BI Desktop hands-on. The first step is to launch and explore the user interface (UI).

In this unit, you will:
•Launch the Power BI Desktop.
•Explore the UI.

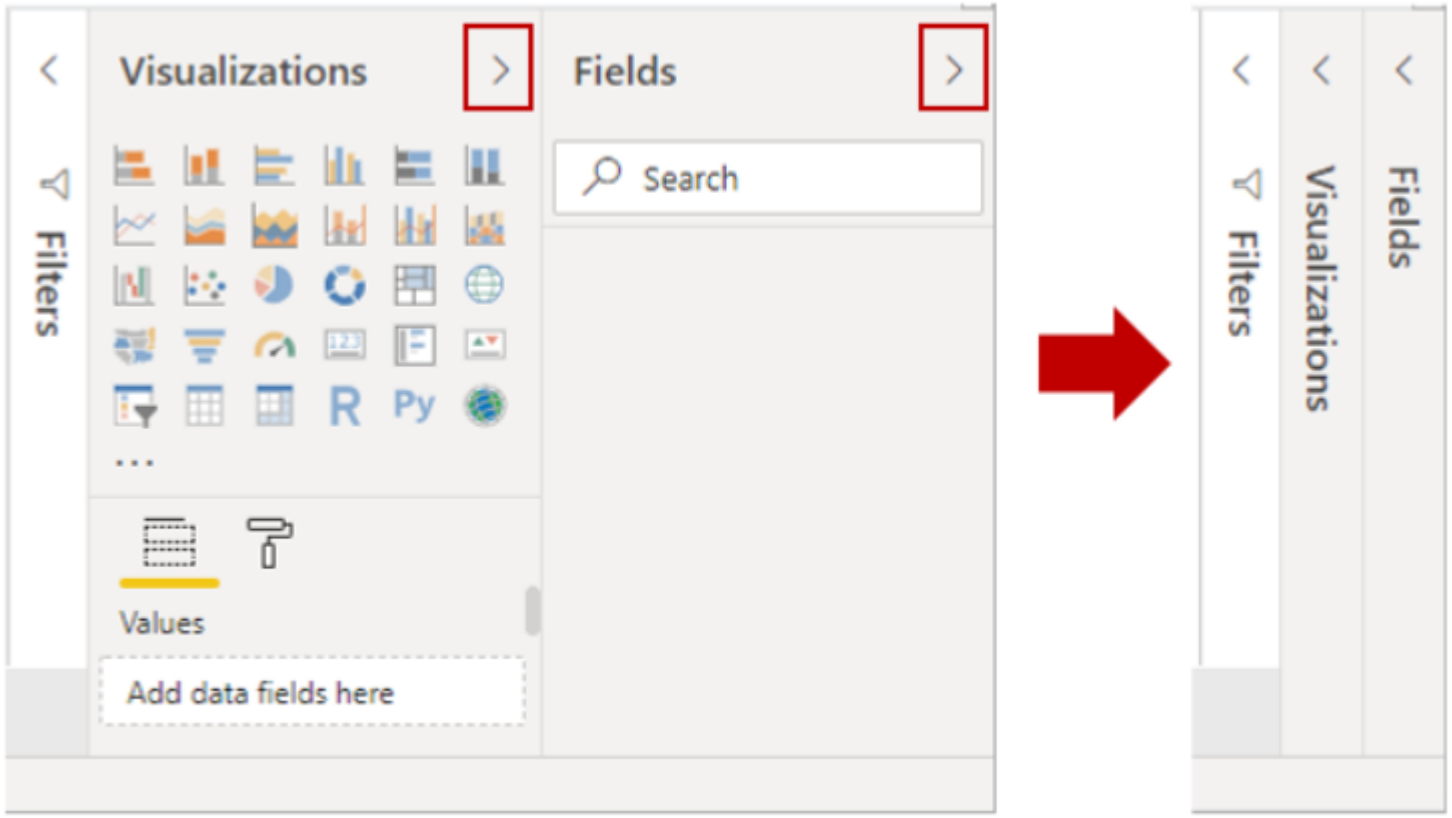


Launch Power BI Desktop



1.Ribbon - Displays common tasks that are associated with reports and visualizations.
2.Report view, or canvas - Where visualizations are created and arranged. You can switch between **Report**, **Data**, and **Model** views by selecting the icons in the left column.
3.Pages tab - Located along the bottom of the page, this area is where you would select or add a report page.
4.Visualizations pane - Where you can change visualizations, customize colors or axes, apply filters, drag fields, and more.
5.Fields pane - Where query elements and filters can be dragged onto the **Report** view or dragged to the **Filters** area of the Visualizations pane.

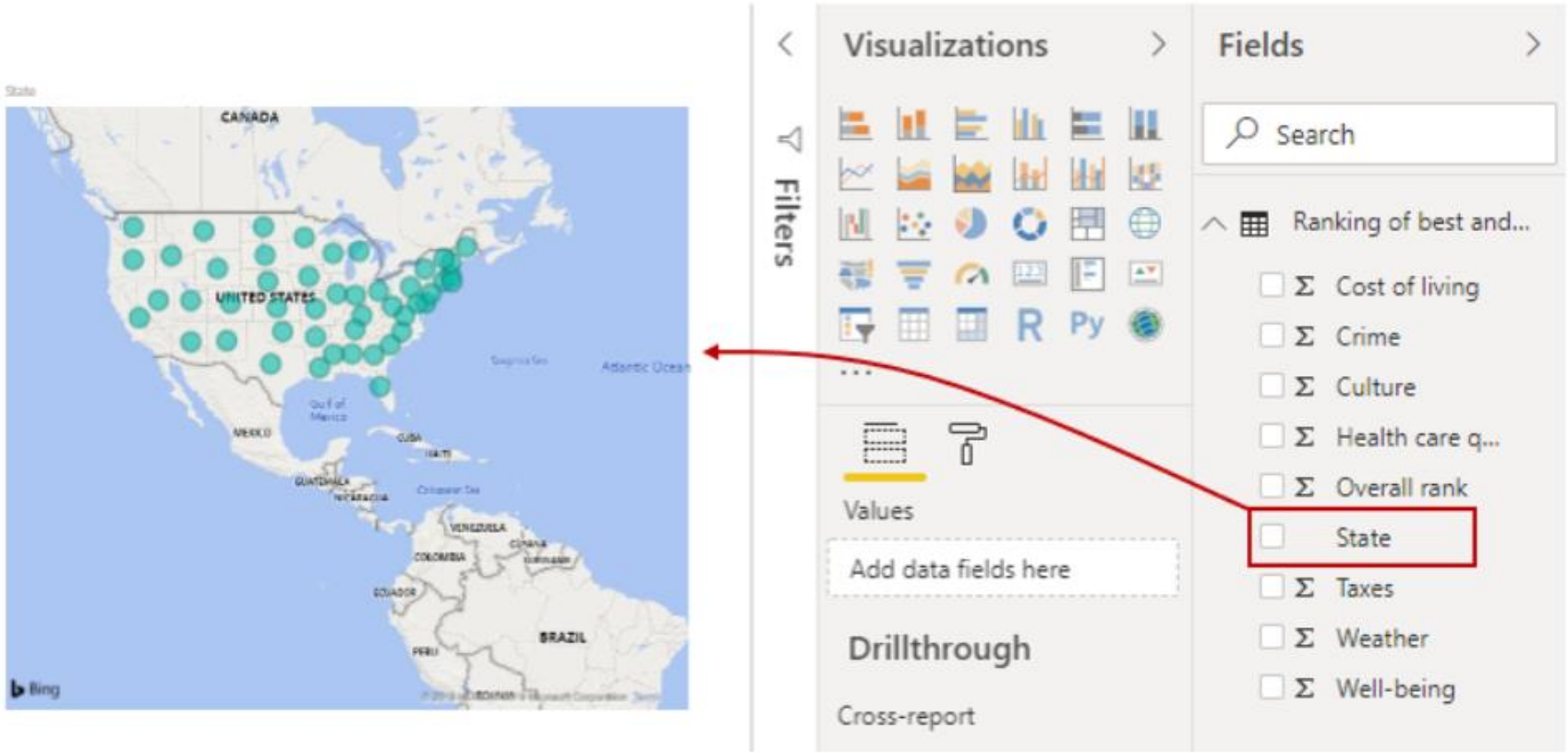
Tip: You can collapse the Visualizations and Fields panes to provide more space in the **Report** view by selecting the small arrow, as shown in the following screenshot.



Power BI Desktop automatically created a map-based visualization because it recognized that the **State** field contained geolocation data.

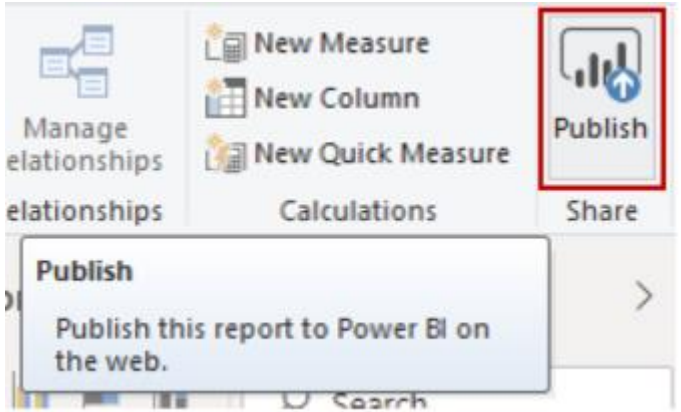
Create a visual

To create a visual, drag a field from the **Fields** list onto the **Report** view.

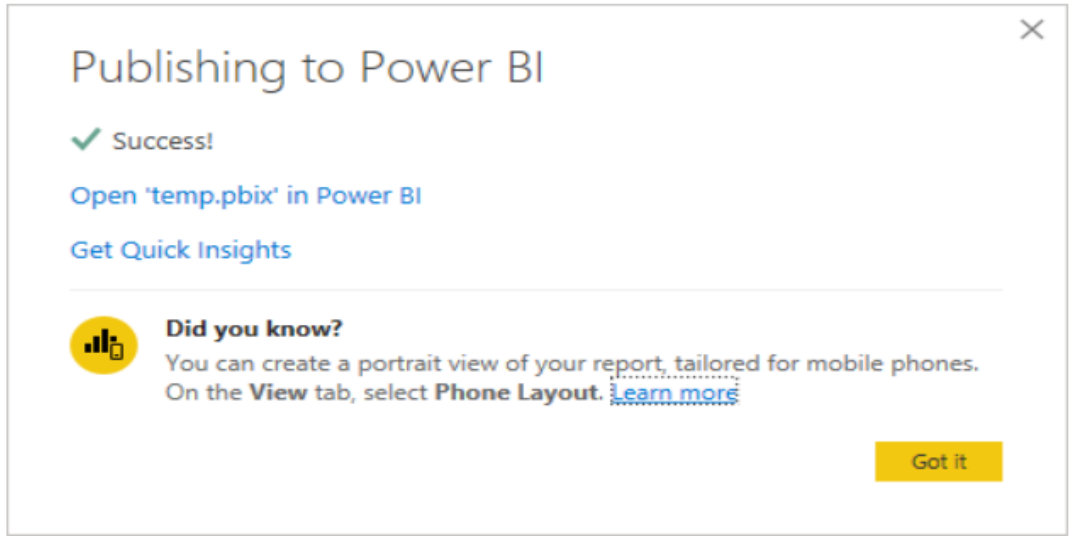


Publish a report

After creating a report with a few visuals, you're ready to publish to the Power BI service. On the **Home** ribbon on the Power BI Desktop, select **Publish**

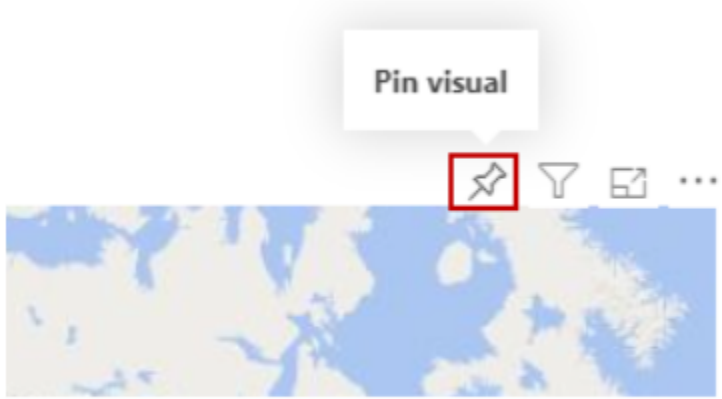


You'll be prompted to sign in to Power BI. When you've signed in and the publish process is complete, the following dialog box will appear. You can select the link below **Success!**, which will take you to the Power BI service, where you can see the report that you published.



Pin a visual to a dashboard

When you view a published report in the Power BI service, you can choose the **Pin** icon to pin that visual to a dashboard.

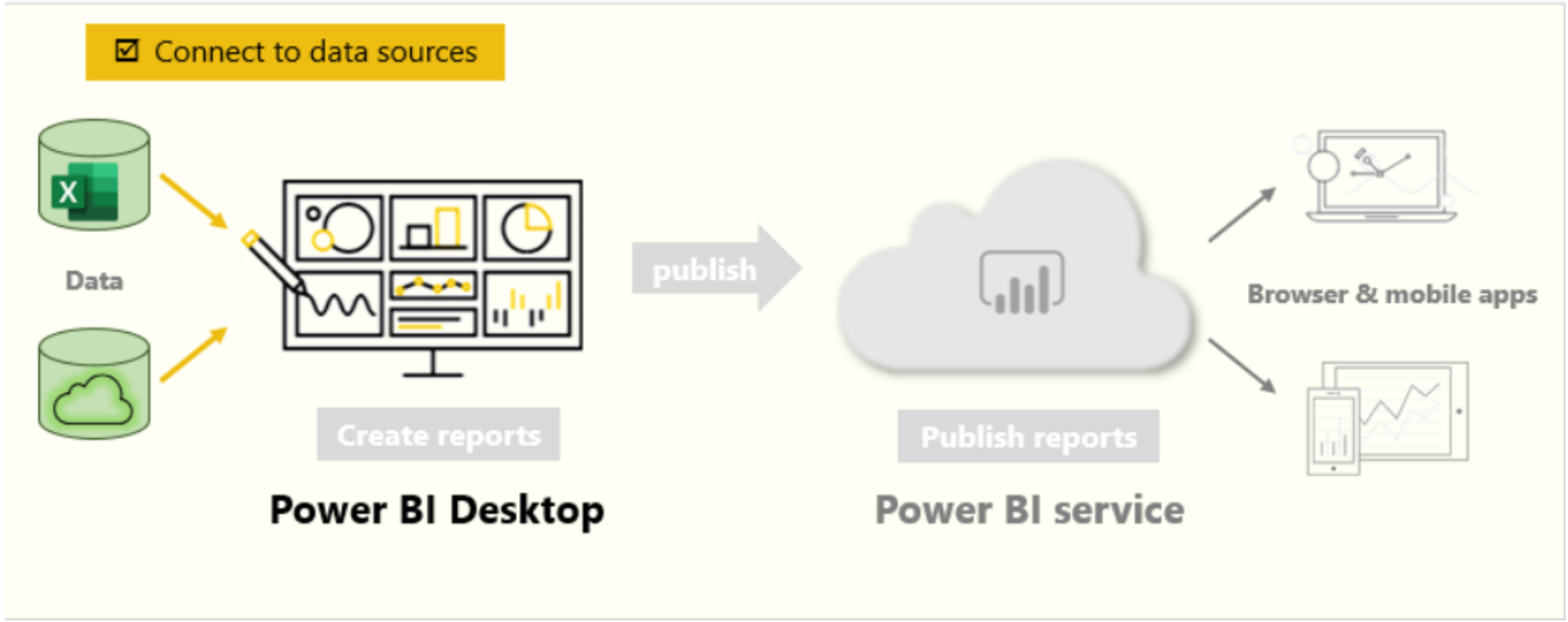


You can choose whether to pin the visual to an existing dashboard or to create a new dashboard.

Connect to data sources

Power BI Desktop connects to many types of data sources, including local databases, worksheets, and data on cloud services. Sometimes when you gather data, it's not quite as structured, or clean, as you want it to be. To structure data, you can transform it, meaning that you can split and rename columns, change data types, and create relationships between columns.

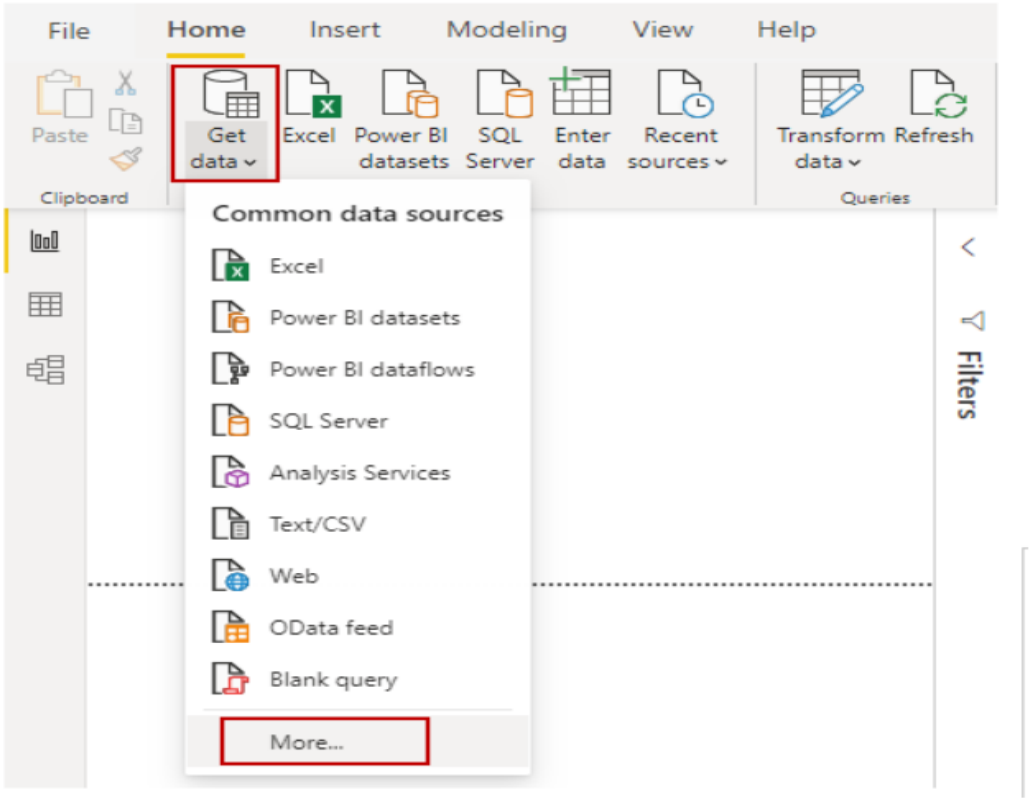
- Connect to data.
- Import data into Power BI Desktop.



You can connect Power BI Desktop to many types of data sources, including on-premises databases, Microsoft Excel workbooks, and cloud services. Currently, there are about 60 Power BI-specific connectors to cloud services such as GitHub and Marketo. You can also connect to generic sources through XML, CSV, text, and ODBC. Power BI will even extract tabular data directly from a website URL.

Connect to data

When you start Power BI Desktop, you can choose **Get Data** from the ribbon on the **Home** tab.



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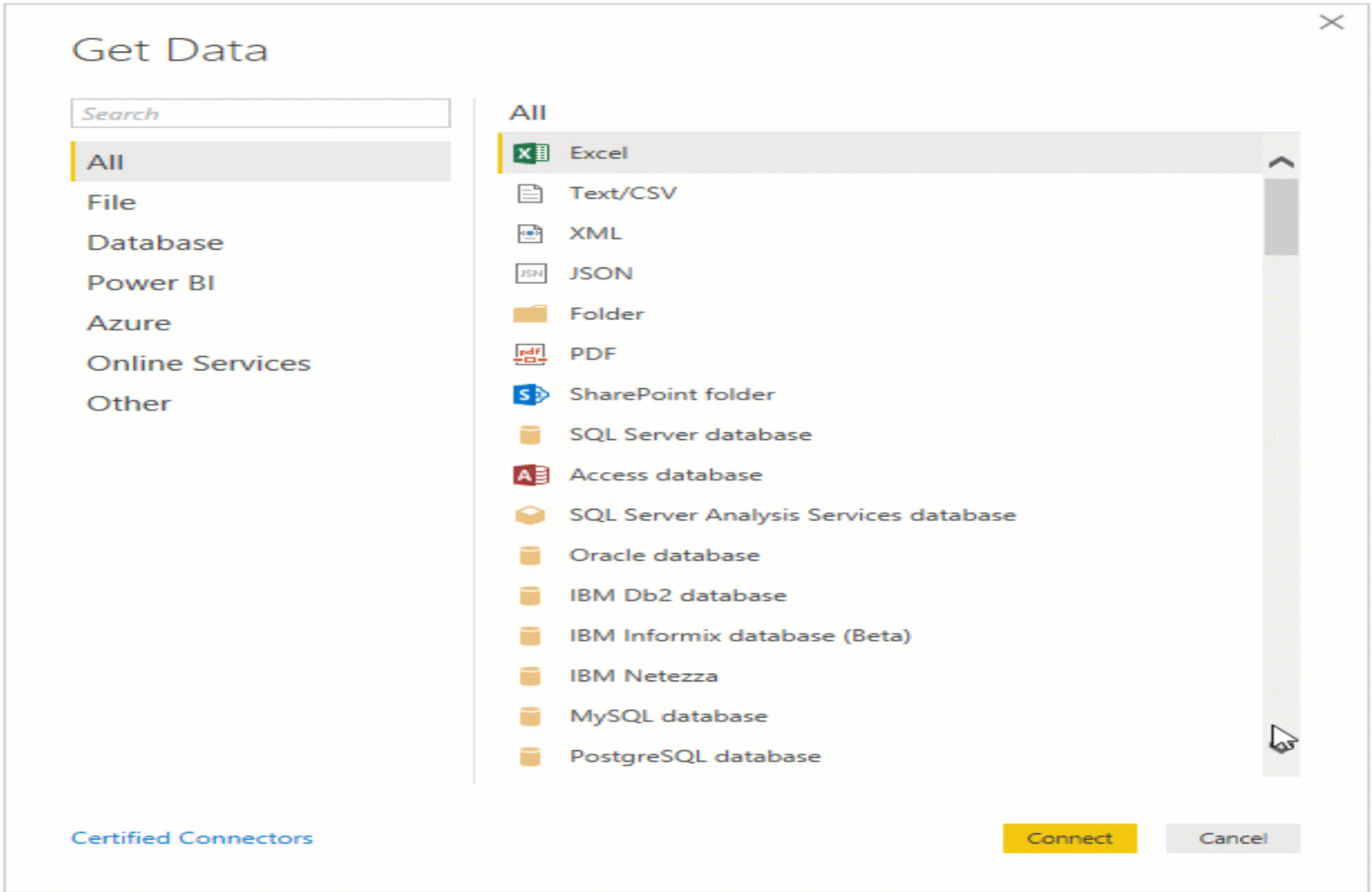
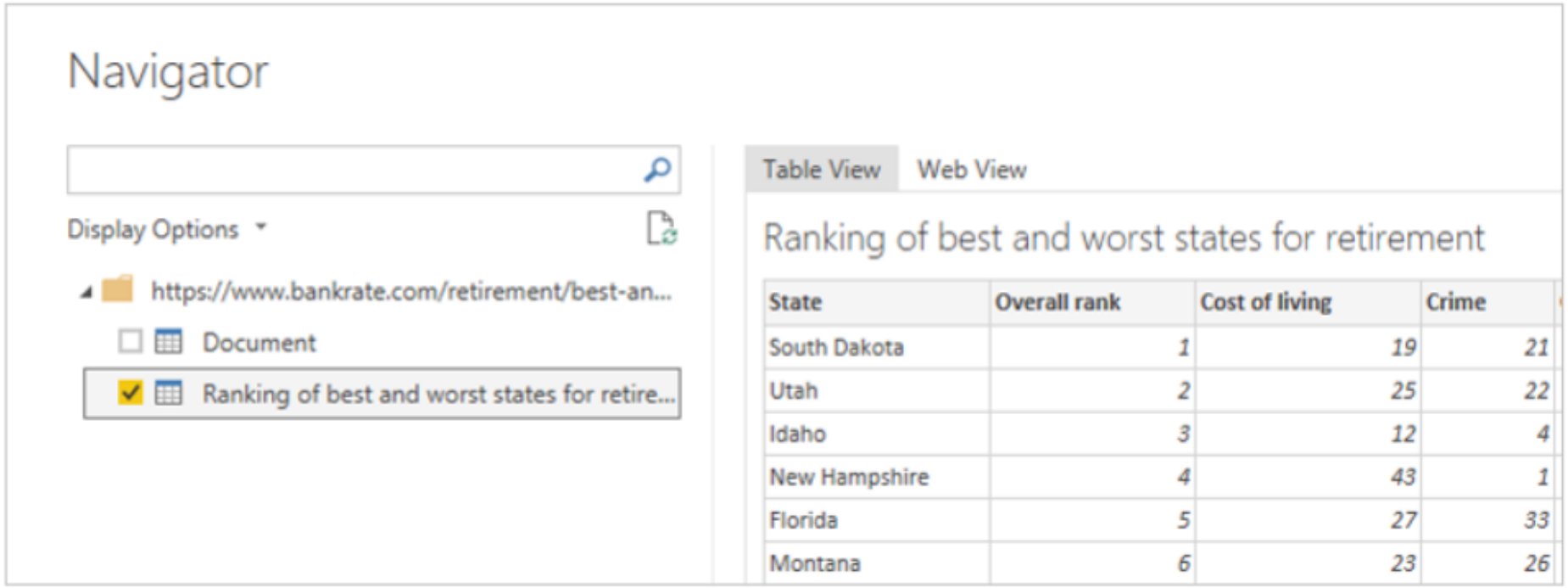


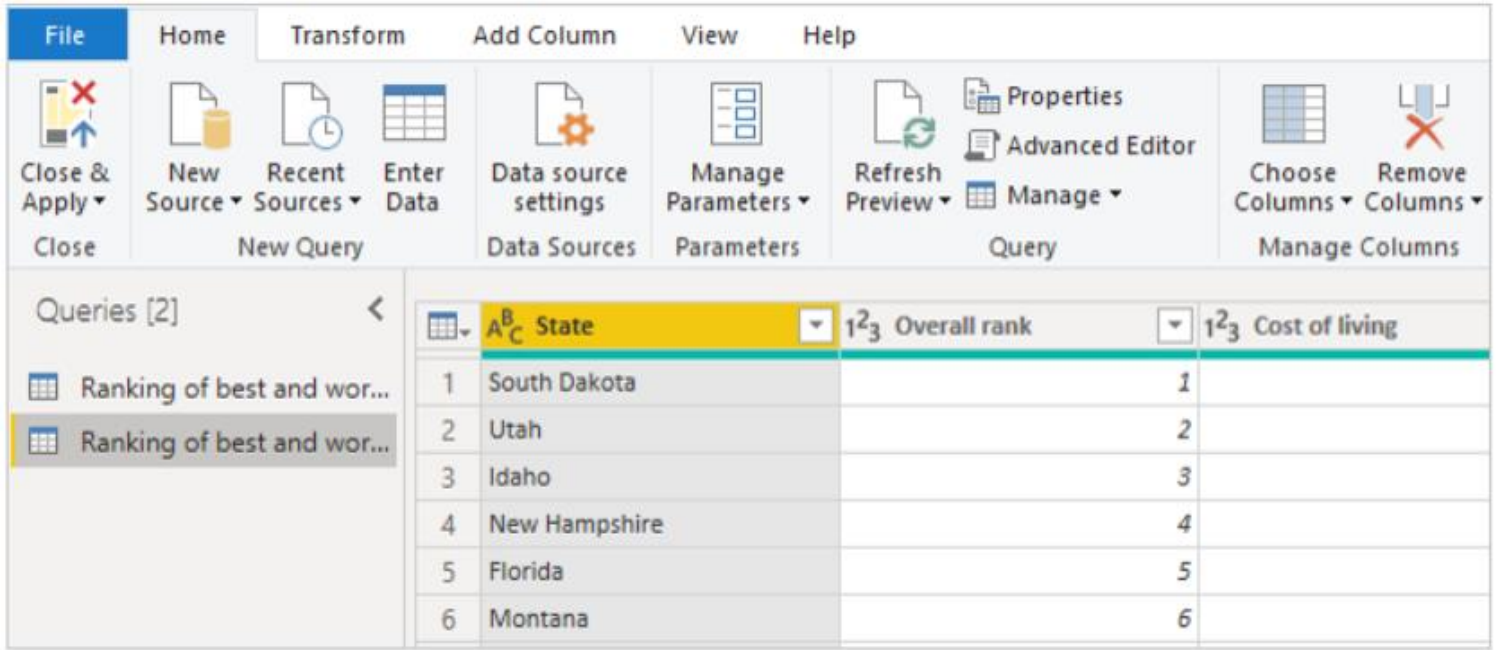
Choose data to import

After connecting, the first window that you'll see is the **Navigator**. The **Navigator** window displays the tables or entities of your data source, and selecting a table or entity gives you a preview of its contents. You can then import your selected tables or entities immediately by selecting **Load**, or you can select **Transform Data** to transform and clean your data before importing.



State	Overall rank	Cost of living	Crime
South Dakota	1	19	21
Utah	2	25	22
Idaho	3	12	4
New Hampshire	4	43	1
Florida	5	27	33
Montana	6	23	26

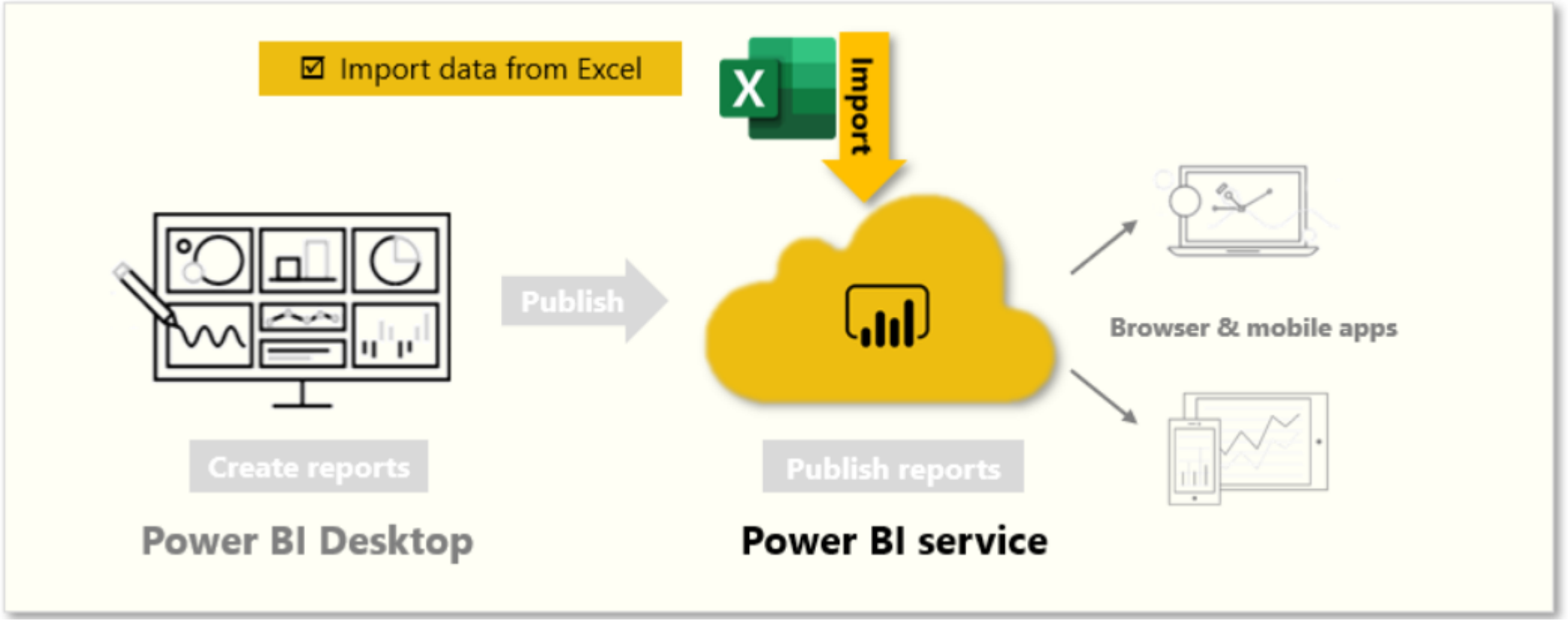
After you've selected the tables that you'd like to bring into Power BI Desktop, select the **Load** button. You might want to make changes to those tables before you load them. For example, if you only want a subset of customers or a specific country or region, select the **Edit** button and filter data before loading.



No matter what type of data you need, you're likely to find a way to import it into Power BI Desktop.

Get data from Excel

Likely, you've used Microsoft Excel to create or view reports or to build pie charts or other visuals. Getting your Excel data into Power BI is a straightforward process.
In this unit, you will bring Excel workbooks into Power BI.



To follow along with the example in this video, download the sample Excel workbook financial sample.xls file.

Explains how you can import an Excel workbook file that contains a simple table from a local drive into Power BI. You'll then learn how to begin exploring that table's data in Power BI by creating a report.

Make sure that your data is formatted as a table

For Power BI to import data from your workbook, that data needs to be formatted as a table. In Excel, you can highlight a range of cells, and then on the **Insert** tab of the Excel ribbon, select **Table**.

Data types

Power BI supports the following data types: **Whole Number, Decimal Number, Currency, Date, True/False, Text**. Marking data as specific data types in Excel will improve the Power BI experience

Knowledge Checks

Today how many ways we connected data in power BI and tell different data source available in get data

What are the left side Icons in visualization pane? how many options are there?

Datatypes that are supported by power bi?